

## Appendix B Consolidated environmental mitigation commitments of the Project

ID	Mitigation measures	Project stage
<b>Visual</b>		
V1	<ul style="list-style-type: none"> <li>The following design measures must be included in the final infrastructure layout (and are included in the Indicative infrastructure layout, Appendix F.2):</li> <li>Visible solar farm infrastructure 300 metres back from the Great Western Highway to reduce the visibility of the project from the Highway and dwellings to the north</li> <li>A solar panel exclusion zone included to reduce glimpse views for motorists west bound from the Great Western Highway.</li> <li>Setbacks from the southern site boundary where the nearest neighbouring dwellings are located</li> <li>Location of the Substation, BESS, and Operations and maintenance facility to the south of a natural rise in landform, to reduce its visibility from the Greater Western Highway and surrounding residences.</li> <li>Reducing the panel arrays from double portrait (that would be up to 5 metres high) to single portrait (up to 3.5 metres high)</li> <li>Setting a 4-degree resting angle during backtracking to reduce the potential glare risk (R7)</li> <li>Cabling to the Essential Energy Infrastructure at the north of the would be underground.</li> </ul>	Design
V2	Engage with affected residents as part of the development of the final LMP, seeking their input on key decisions that affect their residential views. An independent facilitator would be selected if preferred by residents.	Design.
V3	<p>Prepare and implement detailed landscaping treatments in accordance with the concept LMP for the life of the Project, included as Appendix A of the Visual Impact Assessment. In summary:</p> <ul style="list-style-type: none"> <li>Revegetation of the stream through the centre of the site, to break up the site with vegetation.</li> <li>Screening planting along the western site boundary.</li> <li>Screening planting and trees along Brewongle Lane.</li> <li>Screening vegetation along the northern site boundary.</li> <li>Retention a 5m wide area of vegetation along the northern site boundary, west of the substation access road. This area would be supplemented with additional tree and shrub planting, which would filter views to the site from Awaba Road over time.</li> </ul> <p>To ensure the best short and long-term outcomes from the proposed landscape works it is recommended that planting should not be installed prior to other construction activity occurring on the site. To do so</p>	Design, Construction, operation

ID	Mitigation measures	Project stage
	increases the risk of planting not being installed under optimal planting conditions and damage to planting areas by machinery and vehicles working adjacent to landscaped areas.	
V4	Lighting at the construction compound would be designed and operated in accordance with AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.	
V5	Lighting at the BESS and substation would be designed and operated in accordance with AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.	Operation
V6	The solar inverter stations, switch rooms, battery enclosures, office and maintenance building, and water tanks to be a neutral colour, such as grey, to reduce their prominence in views from surrounding dwellings where visible.	Operation
<b>Biodiversity</b>		
B1	Retaining dams: Some dams within the development site will be retained for use by native species (i.e., Southern Myotis)	Prior to construction - ongoing
B2	Staff inductions: All staff working on the Project would be inducted in onsite environmental procedures (i.e., vegetation management, sediment and erosion control, protective fencing, weeds, hygiene protocols, ethical procedures for handling fauna displaced on the site, site speed limits, biodiversity considerations etc).	Prior to any employee commencing work
B3	The physical vegetation clearing boundary at the approved clearing limit is to be identified and effectively communicated to personnel. The delineation of such a boundary may include the use of temporary fencing or parawebbing and marked as 'No-Go Zones'. Regular inspections should be undertaken to ensure all retained vegetation/fauna habitat is clearly marked and that fencing is in place, where appropriate.	Prior to construction
B4	<p>To minimise clearing impacts:</p> <ul style="list-style-type: none"> <li>Preclearing inspections would be undertaken by a qualified ecologist</li> <li>An ecologist or spotter/catcher would be present for the removal of hollow-bearing trees, logs or stags which could contain native fauna</li> <li>Avoid clearing in Spring where possible</li> <li>Implement staged habitat removal.</li> </ul> <p>Reuse fallen timber for habitat.</p>	During and post construction
B5	To compensate for the loss of large hollows, nest-boxes or creation of tree hollows through pruning remaining trees will be carried out.	During and post construction
B6	Devise a soil and waste rock management strategy	Prior to construction

ID	Mitigation measures	Project stage
B7	Devise a Water management strategy	Prior to construction
B8	Devise a Waste management strategy	Prior to construction
B9	Devise an Air quality management strategy	Prior to construction
B10	Devise a Biodiversity management strategy	Prior to construction
B11	Devise a Bushfire management strategy	Prior to construction
B12	Devise a Noise management strategy	Prior to construction
B13	Devise a Biosecurity management strategy	Prior to construction
B14	<p>The Project's offset obligation will be met in accordance with the NSW Biodiversity Offsets Scheme (BOS), and will be achieved by either:</p> <ul style="list-style-type: none"> <li>d) Retiring credits under the Biodiversity Offsets Scheme based on the like-for-like rules, or</li> <li>e) Making payments into the Biodiversity Conservation Fund using the offset payments calculator, or</li> </ul> <p>Funding a biodiversity action that benefits the threaten entities impacted by the development.</p>	Prior to construction
<b>Aboriginal Heritage</b>		
AH1	The locations of the cultural heritage sites would be provided to the supervisors responsible for the construction and operation. They would be informed that cultural heritage sites are protected under the NPW Act, and no harm is to come to them. The presence of the cultural heritage sites should be made clear to the workforce as part of an induction.	Prior to construction - ongoing
AH 3	<p>G-ISO-01 (AHIMS ID Pending):</p> <ul style="list-style-type: none"> <li>• Would be relocated by an agreed upon person (RAP) to the base of G-CMT-01 in accordance with the Code of Practice of Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010b).</li> </ul> <p>The work crew would be made aware of the location of the site and the protection afforded under the <i>Aboriginal Cultural Heritage Act 2003</i>.</p>	Prior to construction - ongoing
AH 6	<p>G-CMT-01 (AHIMS ID Pending) would be protected against inadvertent impacts during the construction of the proposal:</p> <ul style="list-style-type: none"> <li>• A high-visibility temporary fence should be erected around the tree with a minimum 2m buffer from the dripline of the tree.</li> </ul> <p>The work crew would be made aware of the location of the site and the protection afforded under the <i>Aboriginal Cultural Heritage Act 2003</i>.</p>	During construction - ongoing
AH 9	If changes are made to the proposed works which could impact locations outside of the proposed Development footprint disturbance area, further archaeological investigation may be required	During construction - ongoing

ID	Mitigation measures	Project stage
AH 10	If any objects of suspected Aboriginal heritage origin are encountered during the proposed works, work in the area of the find should cease and the unexpected finds protocols should be implemented.	During construction - ongoing
AH 12	If suspected human remains are located during any stage of the proposed works, work must stop immediately, and the NSW police must be notified.	During construction - ongoing
<b>Land Compatibility</b>		
S1	<p>A Soil and Water Management Plan (SWMP) (with site-specific erosion and sediment control plans) would be prepared, implemented and monitored during the Project, in accordance with the 'Blue Book' (Landcom, 2004) to minimise soil (and water) impacts. These plans would include provisions to:</p> <ul style="list-style-type: none"> <li>• Install, monitor and maintain erosion controls.</li> <li>• Ensure that machinery leaves the site in a clean condition to avoid tracking of sediment onto public roads which may cause risks to other road users through reduced road stability.</li> <li>• Manage topsoil in all excavation activities, separate subsoils and topsoils and ensure that they are replaced in their natural configuration to assist revegetation. Stockpile topsoil appropriately so as to minimise weed infestation, maintain soil organic matter, maintain soil structure and microbial activity.</li> <li>• Minimise the area of disturbance from excavation and compaction; rationalise vehicle movements and restrict the location of activities that compact and erode the soils as much as practical. Any compaction caused during construction would be treated such that revegetation would not be impaired.</li> <li>• Manage works in consideration of heavy rainfall events; if a heavy rainfall event is predicted, the site should be stabilised, and work ceased until the wet period had passed.</li> </ul> <p>Topsoil and grass pasture should be kept in place where disturbance is not required.</p>	Construction
S2	<p>Areas of soil disturbed by the Project would be rehabilitated progressively with grass pastures, with reference to the guidance provided in SLR's supporting soil and agricultural assessments. Specifically:</p> <p>During construction gypsum would be applied for any earthworks where sodic subsoils (ESP of greater than 5%) are exposed, to minimise the potential for sheet or tunnel erosion</p>	
S3	<p>A Groundcover Management Plan would be developed in consultation with an agronomist and to ensure final land use includes perennial grass cover establishment across the site as soon as practicable after construction and maintained throughout the operation phase. The plan would cover:</p> <ul style="list-style-type: none"> <li>• Soil handling, restoration and preparation requirements.</li> <li>• Plant Species election.</li> </ul>	Construction and operation

ID	Mitigation measures	Project stage
	<ul style="list-style-type: none"> <li>• Soil preparation.</li> <li>• Establishment techniques.</li> <li>• Maintenance and monitoring requirements.</li> <li>• Perennial groundcover targets, indicators, condition monitoring, reporting and evaluation arrangements – i.e. A target of 70% live grass cover would apply to protect soils, landscape function and water quality. Additional measures would be implemented where practical when live grass cover falls below 70%. Grass cover would be monitored on a fortnightly basis using an accepted methodology.</li> <li>• Contingency measures to respond to declining soil or groundcover condition. I.e., any grazing stock would be removed from the site when cover falls below the target of 70% live ground cover.</li> <li>• Identification of baseline conditions for rehabilitation following decommissioning.</li> </ul> <p>Preserve the native composition as much as possible.</p>	
S4	The array would be designed to allow sufficient space between panels to establish and promote groundcover beneath the panels and allow for implementation of weed controls.	Design
S5	<p>A Spill and Contamination Response Plan would be developed as part of the overall Emergency Response Plan to prevent contaminants affecting adjacent surrounding environments. The plan would include measures to:</p> <ul style="list-style-type: none"> <li>• Respond to the discovery of existing contaminants at the site (e.g., pesticide containers or asbestos), including stop work protocols and remediation and disposal requirements.</li> <li>• Requirement to notify the EPA for incidents that cause material harm to the environment (refer s147-153 of the POEO Act).</li> <li>• Manage the storage of any potential contaminants onsite.</li> <li>• Mitigate the effects of soil contamination by fuels or other chemicals (including emergency response and the EPA notification procedures and remediation.</li> <li>• Ensure that machinery arrives on site in a clean, washed condition, free of fluid leaks.</li> <li>• Prevent contaminants affecting adjacent pastures, dams, water courses and native vegetation.</li> <li>• Monitor and maintain spill equipment</li> </ul> <p>Induct and train all site staff.</p>	Construction, operation and decommissioning
S6	All equipment and materials stored onsite will be subject to a spill protocol to specify bunding and storage requirements.	Construction and operation
S7	A Rehabilitation Plan would be prepared to ensure the array site is returned to at least or better than pre-solar farmland and soil capability during the decommissioning stage. The plan would include:	Construction and decommissioning

ID	Mitigation measures	Project stage
	<ul style="list-style-type: none"> <li>• Identification and quantification of potential soil resources for rehabilitation.</li> <li>• Optimisation and recovery of useable topsoil and subsoil during stripping operations.</li> <li>• Management of soil reserves in stockpiles so as not to degrade the resource.</li> <li>• Establishment of effective soil amelioration procedures to maximise the availability of soil reserve for future rehabilitation works.</li> <li>• Returning the land to its pre-solar capability and improving the current state of the land.</li> <li>• Development of completion criteria and monitoring reporting.</li> </ul> <p>The plan would be developed with reference to the base line soil testing and with input from an agronomist to ensure the site is left stabilised, under a cover crop or other suitable ground cover. The soil survey would be based on:</p> <ul style="list-style-type: none"> <li>• <i>Australian Soil and Land Survey Handbook</i> (National Committee on Soil and Terrain, 2009)</li> <li>• <i>Guidelines for Surveying Soil and Land Resources</i> (McKenzie, Grundy, &amp; Ringrose-Voase, 2008)</li> </ul> <p><i>The land and soil capability assessment scheme: second approximation</i> (OEH, 2012).</p>	
S8	All above ground infrastructure would be removed upon decommissioning.	Decommissioning
S9	Reinstatement of internal fencing and farm dams which are removed during construction would occur, at the request of the landowner.	Decommissioning
<b>Flooding</b>		
W1	<p>Buildings and structures</p> <ul style="list-style-type: none"> <li>• Located outside high Hazard areas (H5 and above).</li> <li>• Finished floor level of all buildings would be a minimum 500mm above the 1%AEP flood level.</li> </ul> <p>Fixed solar panel modules</p> <ul style="list-style-type: none"> <li>• Mounting height of module frames would be designed so that the lower edge of the frame is clear of the 1% AEP <b>plus</b> 500mm Freeboard.</li> </ul> <p>Solar tracking modules</p> <ul style="list-style-type: none"> <li>• Tracking axis should be located above the 1%AEP <b>plus</b> 500mm freeboard.</li> <li>• Modules rotated to the horizontal during significant flood events to provide maximum clearance to the predicted flood level.</li> </ul> <p>Modules located in floodplain</p> <ul style="list-style-type: none"> <li>• Designed to withstand forces of floodwater and potential debris loading up to the 1% flood event (depth and velocity of flood)</li> </ul>	Design

ID	Mitigation measures	Project stage
	<p>waters).</p> <p>Electrical infrastructure</p> <ul style="list-style-type: none"> <li>All electrical infrastructure including power conversion stations and substation located above the 1% AEP flood level <b>plus</b> minimum 500mm freeboard.</li> </ul> <p>Perimeter fencing</p> <ul style="list-style-type: none"> <li>Avoid/minimise security fencing in floodplain</li> <li>If required, security fencing should be constructed to minimise the effect of flow of the floodwater and be designed to withstand the forces of floodwater or collapse in a controlled manner to prevent impediment to floodwater.</li> </ul> <p>Works in waterways</p> <ul style="list-style-type: none"> <li>Designed to minimise any hydraulic impact in accord with Laying Pipes and Cable in Watercourses on Waterfront Land (NSW DPI, 2012b).</li> <li>Crossings designed in accordance with Guidelines for Watercourse Crossings on Waterfront Land (NSW DPI, 2012a).</li> </ul> <p>Access roads</p> <ul style="list-style-type: none"> <li>Floodplain – keep as close to natural ground levels as possible.</li> </ul> <p>Surface treatment – give regard to velocity of floodwaters to minimise potential for souring during flood events.</p>	
W2	<p>An Emergency Response Plan incorporating a Flood Response Plan would be prepared in consultation with Council prior to construction covering all phases of the proposal. In relation to flooding the plan will:</p> <ul style="list-style-type: none"> <li>Detail who would be responsible for monitoring the flood threat and how this is to be done.</li> <li>Detail specific response measures to ensure site safety and environmental protection.</li> <li>Outline a process for removing any necessary equipment and materials offsite and out of flood risk areas (i.e., rotate array modules to provide maximum clearance of the predicted flood level).</li> <li>Consider site access in the event that some tracks become flooded.</li> <li>Consider appropriate vehicles used to transport staff to and from site, with 4WDs being the preferred vehicle.</li> <li>Establish an evacuation point.</li> </ul> <p>Define communication protocols with emergency services agencies.</p>	<p>Construction</p> <p>Operation</p> <p>Decommissioning</p>
W3	<p>Final design must take into consideration more detailed geotechnical investigations to ensure groundwater interception is avoided by cut and fill works.</p>	Design
<b>Erosion, water use and water quality</b>		
W4	<p>Areas of exiting erosion would be stabilised prior to erection of solar array to ensure ongoing stability.</p>	Prior to construction

ID	Mitigation measures	Project stage
W5	<p>As part of the CEMP, the SWMP (incorporating a Site Drainage Plan and Erosion and Sediment Control Plan) will include the following water considerations:</p> <ul style="list-style-type: none"> <li>Identify and protect sensitive features such as dams and water courses</li> </ul> <p>Ensure any discharge of water from the site is managed to ensure ANZECC (2000) water quality criteria are met as far as practicable, ensure excavations are not scheduled when heavy rainfall events are predicted, or soils are saturated.</p>	Pre-construction Construction
W6	<p>The Spill and Contamination Response Plan prepared as part of the Emergency Response Plan would include measures to:</p> <ul style="list-style-type: none"> <li>Respond to the discovery of existing contaminants at the site (e.g., Pesticide containers or asbestos), including stop work protocols and remediation and disposal requirements,</li> <li>Manage the storage of any potential contaminants on-site,</li> <li>Mitigate the effects of soil and water contamination by fuels or other chemicals (including emergency response and EPA notification procedures),</li> <li>Ensure that machinery and materials arrive on site in a clean and secure condition,</li> <li>Prevent contaminants affecting adjacent pastures, water courses, dams and native vegetation,</li> <li>Monitor and maintain spill equipment including spill kits in relevant machinery,</li> <li>Induct and train site staff,</li> <li>Detail fuels, chemicals, and liquids storage locations that are at least 50m from any waterways or drainage lines, in an appropriate bunded area,</li> <li>Disposal process for contaminated materials.</li> </ul> <p>Inspect stormwater control measures before and after rainfall of more than 10mm in 24 hours and at least quarterly.</p>	Construction Operation Decommissioning
W7	An unexpected finds protocol is to be prepared prior to construction including actions to be undertaken if contaminated soils and/or water are encountered during construction.	Pre-construction Construction
W8	Water supply agreements will be secured in consultation with Bathurst Regional Council and private water suppliers prior to construction to ensure adequate water supply is secured for construction and operation.	Pre-construction
W9	Re-use of collected stormwater (from dams or sediment basins) will be considered wherever possible.	Construction Operation Decommissioning
<b>Noise and Vibration</b>		
N1	Bored piling (rather than impact piling) would be considered if practical,	Prior to construction



ID	Mitigation measures	Project stage
	as an alternative to install the steel post foundations.	
N2	Once the selection of equipment has been finalised, a review should be undertaken to ensure that the noise levels do not exceed the assumed levels in this assessment.	Prior to construction
N3	A noise management plan would be prepared and implemented as part of the CEMP.	Prior to construction
N4	<p>Consultation would occur as part of noise management as follows:</p> <ul style="list-style-type: none"> <li>The construction contractor would establish contact with residents affected by construction noise and communicate the construction program and progress on a regular basis, particularly when noise generating activities are planned.</li> <li>Communication with the local community would be maintained throughout the construction period.</li> <li>The construction contractor would provide a community liaison phone number and permanent site contact so that noise complaints can be received and addressed in a timely manner.</li> <li>Upon receipt of a noise complaint, monitoring would be undertaken and reported as soon as possible. If exceedances are detected, the situation would be reviewed to identify means to attempt to reduce the impact to acceptable levels.</li> </ul> <p>Where noise level exceedances cannot be avoided, consideration must be given to providing periods of repose for residents in negotiation with the residents.</p>	During construction
N5	<p>Management of worker generated construction noise would include briefing all site workers on the potential for noise impacts on local residents and the requirement to implement practical and reasonable measures to minimise noise impacts during the course of their activities. This would include:</p> <ul style="list-style-type: none"> <li>Avoiding the use of loud radios.</li> <li>Avoiding shouting and slamming doors.</li> <li>Where practical, machines would be operated at low speed or power and switched off when not being used rather than left idling for prolonged periods</li> <li>Inform truck drivers of designated vehicle routes, parking locations and delivery hours.</li> <li>Minimising reversing.</li> <li>Avoiding dropping materials from height and avoiding metal to metal contact on material.</li> </ul> <p>Keeping engine covers closed while equipment is operating.</p>	During construction
N6	<p>The following general noise mitigation measures would be implemented to mitigate construction noise impacts:</p> <ul style="list-style-type: none"> <li>All engine covers would be kept closed while equipment is</li> </ul>	During construction

ID	Mitigation measures	Project stage
	<p>operating.</p> <ul style="list-style-type: none"> <li>Where possible use less noisy plant and equipment.</li> <li>Provide special attention to the use and maintenance of 'noise control' or silencing kits fitted to machines to ensure they perform as intended.</li> <li>Plant and equipment should be properly maintained.</li> <li>Avoid any unnecessary noise when carrying out manual operations and when operating plant.</li> <li>Switch off plant when not in use.</li> <li>Trucks should not be left idling where possible.</li> <li>As far as possible, heights from which materials are dropped, into or out of trucks, would be minimised.</li> </ul> <p>Machines found to produce excessive noise compared to industry best practice would be removed from the site or stood down until repairs or modifications can be made.</p>	
N7	To reduce the annoyance associated with reversing alarms, broadband reversing alarms (audible movement alarms) would be used for all site equipment. Satisfactory compliance with occupational health and safety requirements would need to be achieved and a safety risk assessment may need to be undertaken to determine that safety is not compromised.	During construction
<b>Social and Economic</b>		
SE1	<p>Community and Stakeholder Engagement Plan; update and extend the existing EIS Engagement Action Plan, so that it details engagement intentions and actions throughout the life of the Project.</p> <p>Over the longer term, the objectives of the CSES would be to:</p> <ul style="list-style-type: none"> <li>Ensure ongoing and transparent engagement with those who are directly impacted, as well as the broader community and other key stakeholders.</li> <li>Build trust and relationships with those who are directly impacted, and well as other key stakeholders.</li> <li>Deliver an agreed and clear Community Benefits Scheme through a participatory approach with residents and the broader community.</li> <li>Ensure provision of an effective complaints process.</li> </ul> <p>Adaptively respond to emerging community concerns and changes in the social environment.</p>	All stages
SE2	<p>Develop and implement an Accommodation and Employment Strategy. The strategy would be developed in partnership with key local stakeholders including:</p> <ul style="list-style-type: none"> <li>Bathurst Regional Council.</li> <li>Bathurst Local Aboriginal Land Council.</li> <li>Economic development and industry support agencies (e.g.,</li> </ul>	Construction

ID	Mitigation measures	Project stage
	<p>Regional Development Australia, Bathurst Business Chamber, Industry Capability Network, Charles Sturt University).</p> <ul style="list-style-type: none"> <li>Training and employment support agencies (e.g., TAFE, Skillset, Joblink Plus).</li> </ul> <p>It would implement local participation elements and construction workforce elements as described by the SIA, Appendix D.9, and summarised above.</p>	
SE3	Develop and implement a Community Benefit Sharing Program as outlined in Section 3.5.3 of this EIS.	All stages
<b>Traffic and transport</b>		
T1	<p>A Construction Traffic Management Plan (CTMP) will be prepared and implemented. The following provisions will be included to minimise the impact of construction traffic along the unsealed roads:</p> <ul style="list-style-type: none"> <li>Prior to construction, a pre-condition survey of the relevant sections of the existing road network be undertaken, in consultation with Council. During construction the sections of the road network utilised by the proposal are to be monitored and maintained to ensure continued safe use by all road users, and any faults attributed to construction of the solar farm would be rectified. At the end of construction, a post-condition survey would be undertaken to ensure the road network is left in the consistent condition as at the start of construction.</li> <li>Vehicles are recommended to drive at slower speeds when travelling on unsealed roads. This can reduce the amount of dust created and the amount of dirt tracked onto the public road network. Standard mitigation measures such as a water trucks to dampen the roads and reduce the amount of dust in the air, can also be considered to reduce dust levels.</li> </ul> <p>Neighbours of the solar farm be consulted and notified regarding the timing of major deliveries which may require additional traffic control and disrupt access.</p>	Construction
<b>Historic heritage</b>		
HH 1	<p>If potential archaeological relics are encountered during the proposed works, activity in the immediate area of the find should cease and the unexpected finds protocol detailed in the Cultural Heritage Management Plan (CHMP) would be followed.</p> <p>Depending on the nature of the discovery, additional assessment and excavation permit may be required prior to the recommencement of excavation in the affected area. The Heritage Council would be notified in writing in accordance with Section 146 of the NSW <i>Heritage Act 1977</i> if it was confirmed that relics had been identified.</p>	Construction, operation and decommissioning
HH 2	<p>If suspected human remains are located during any stage of the proposed works, activity must stop immediately, and the NSW police must be notified.</p>	Construction, operation and decommissioning

ID	Mitigation measures	Project stage
<b>BESS Hazard</b>		
H1	Controls set out the PHA hazards register will be implemented throughout all stages of the Project. This is reproduced at the end of this table as Table 6-52.	All stages
H2	<p>The results of the PHA will be included in a Project specific:</p> <ul style="list-style-type: none"> <li>• Bushfire Emergency Management and Operations Plan</li> <li>• Fire Management Plan</li> <li>• Emergency Response Plan</li> </ul> <p>Fire Safety Plan.</p>	All stages
H3	Following a decision of the BESS Original Equipment Manufacturer, the detailed design of the BESS will be undertaken to comply with the requirements of Section 3.3.1 of the PHA.	Design
H4	If the Proponent chooses to use the Tesla Megapack, all recommendations from the Victorian Big Battery Fire Statement of Technical Findings – Victorian Government 2021 will be implemented.	Design
<b>Electric and magnetic fields</b>		
E1	All electrical equipment will be designed in accordance with relevant codes and industry best practice standards in Australia.	Design
E2	All design and engineering will be undertaken by qualified and competent person/s with the support of specialists as required.	Design
E3	Design of electrical infrastructure will minimise EMFs.	Design
<b>Bush fire</b>		
BF1	Dangerous or hazardous materials would be stored and handled in accordance with AS1940-2004: <i>The storage and handling of flammable and combustible liquids</i> .	Construction/ operation/ decommissioning
BF2	<p>Develop a BFEMOP to include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Detailed measures to prevent or mitigate fires igniting;</li> <li>• Work that should not be carried out during total fire bans;</li> <li>• Availability of fire-suppression equipment, access and water;</li> <li>• Storage and maintenance of fuels and other flammable materials;</li> <li>• Notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate;</li> <li>• Appropriate bush fire emergency management planning.</li> </ul> <p>In developing the BFEMOP, NSW RFS and FRNSW would be consulted on the volume of water supplies, fire-fighting equipment maintained on-</p>	Construction/ operation/ decommissioning

ID	Mitigation measures	Project stage
	site, fire truck connectivity requirements, proposed APZ and access arrangements, communications, vegetation fuel levels and hazard reduction measures.	
BF3	<p>An APZ of minimum 10m would be maintained between remnant or planted woody vegetation and solar farm infrastructure.</p> <p>Average grass height within the APZ would be maintained at or below 5cm on average throughout the November to February fire season. Average grass height outside the APZ, including beneath the solar array, would be maintained at or below 10cm throughout the fire season.</p>	Construction/ operation
BF4	Non-combustible (steel or concrete) water storage tanks should be installed adjoining the main internal access road, or nearby the BESS, for fire-fighting and other non-potable water uses, with a 65mm Storz outlet, a metal valve and a minimum of 20,000 litres reserved for fire-fighting purposes, in accordance with PBP. The final location/s of water tanks will be determined in agreement with NSW RFS and FRNSW recommendations.	Construction
BF5	Appropriate fire-fighting equipment would be held on site to respond to any fires that may occur at the site during construction. This equipment would include fire extinguishers, a 1000 litre water cart (fitted with suitable hosing, fittings and diesel firefighting pump) retained on site on a precautionary basis, particularly during any blasting and welding operations. Equipment lists would be detailed in Work Method Statements.	Construction
BF6	The NSW RFS and Fire and Rescue NSW would be provided with a contact point for the solar farm, during construction and operation.	Construction/ operation
BF7	Following commissioning of the solar farm, the local NSW RFS and Fire and Rescue brigades would be invited to an information and orientation day covering access, infrastructure, firefighting resources on-site, fire control strategies and risks/hazards at the site	Operation
BF8	The perimeter access track would comply with the requirements of property access roads in accordance with Table 5.3b of the PBP. All access and egress tracks on the site would be maintained and kept free of parked vehicles to enable rapid response for firefighting crews and to avoid entrapment of staff in the case of bush fire emergencies. Access tracks would be constructed as through roads as far as practicable. Dead end tracks would be signposted and include provision for turning firefighting vehicles.	Construction/ operation/ decommissioning
BF9	A Hot Works Permit system would be applied to ensure that adequate safety measures are in place. Fire extinguishers would be present during all hot works. Where practicable hot works would be carried out in specific safe areas (such as the Construction Compound temporary workshop areas).	Construction/ operation/ decommissioning
BF10	Machinery capable of causing an ignition would not be used during	Construction/

ID	Mitigation measures	Project stage
	bushfire danger weather, including Total Fire Ban days.	operation/ decommissioning
BF11	<p>Prior to operation of the solar farm, an Emergency Response Plan (ERP) would be prepared in consultation with Council, the RFS and Fire and Rescue NSW. This plan must include but not be limited to:</p> <ul style="list-style-type: none"> <li>Specifically addresses foreseeable on-site and off-site fire events and other emergency incidents.</li> <li>Risk control measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the PV system (either in its entirety or partially, as determined by risk assessment).</li> <li>Outline other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site.</li> <li>Two copies of the ERP are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.</li> </ul> <p>Once constructed and prior to operation, the operator of the facility would contact the relevant local emergency management committee.</p>	All stages
BF12	<p>Fire risks associated with the lithium-ion energy storage facility would include:</p> <ul style="list-style-type: none"> <li>Locating the BESS as far as practicable from any sensitive receptors or large stands of vegetation.</li> <li>Installing reliable automated monitoring (voltage and temperature), alarm and shutdown response systems.</li> <li>Installing reliable integrated fire detection and fire suppression systems (inert gas).</li> <li>Ensuring the battery containers are not vulnerable to external heat effects in the event of a bush fire.</li> <li>Designing appropriate separation and isolation between battery containers and between batteries and other infrastructure, including gravel surfacing around the facility for a minimum 10m in accordance with APZ.</li> <li>Compliance with all relevant guidelines and standards.</li> <li>Preparation of a specific Battery Fire Response Plan, under the general BFEMOP, in consultation with fire authorities, fire suppression experts and in reference to relevant standards and guidelines.</li> </ul> <p>Facilitation of first responder training in the management of Lithium-ion battery fires at the site for local brigades.</p>	Design
<b>Air Quality and climate</b>		
A1	Management protocols will include measures to minimise impacts on air	All stages

ID	Mitigation measures	Project stage
	quality including: <ul style="list-style-type: none"> <li>• Identification of high-risk construction activities with potential to generate dust, and control measures for the activities</li> <li>• A process for monitoring dust on-site and weather conditions, as well as procedures for altering management measures where required</li> <li>• A map identifying locations of sensitive receivers</li> <li>• Notification of relevant stakeholders to hours of work and duration of work</li> <li>• An accessible complaints process with a timely response protocol.</li> </ul>	
A3	Dust generation by vehicles accessing the site and earthworks at the site will be suppressed using water applications or other means as required, using visual cues.	Construction/ decommissioning
A4	Stockpiles will be covered or stored in areas not subject to high winds, and vehicle loads of material which may create dust would be covered while using the public road system.	Construction/ decommissioning
A5	All vehicles and machinery used at the site will be in good condition, fitted with appropriate emission controls and comply with the requirements of the POEO Act, relevant Australian standards and manufacturer's operating recommendations. Plant will be operated efficiently and turned off when not in use.	All stages
A6	Fires and material burning is prohibited on the Development site.	All stages
A7	Works that disturb vegetation, soil or stockpiles will not be carried out during strong winds (over 40km/h).	Construction
A8	The use of renewable fuels/power sources for construction will be investigated and implemented where appropriate.	Construction
A9	Materials will be delivered as full loads, and local suppliers utilised where possible, to minimise haulage emissions.	Construction
<b>Resource use and waste generation</b>		
R1	A Waste Management Plan (WMP) would be developed to minimise waste, including: <ul style="list-style-type: none"> <li>• Identification of opportunities to avoid, reuse and recycle, in accordance with the waste hierarchy.</li> <li>• Quantification and classification of all waste streams.</li> <li>• Provision for recycling management on-site.</li> <li>• Provision of toilet facilities for on-site workers and identify that sullage would be disposed of (i.e., pump out to local sewage treatment plant).</li> <li>• Tracking of all waste leaving the site.</li> </ul>	Construction/ Operation/ Decommissioning



ID	Mitigation measures	Project stage
	<ul style="list-style-type: none"> <li>Disposal of waste at facilities permitted to accept the waste.</li> <li>Requirements for hauling waste (such as covered loads).</li> </ul>	
R2	A septic system would be installed and operated according to the Bathurst Regional Council regulations.	Construction/ Operation
R3	Where possible, waste would be removed on a daily basis, or as soon as reasonably practical, to maintain the Development site being litter free.	Construction
R4	Solar panel arrays would be recycled at a facility with the capacity to recover 100% of the end-of-life solar PV modules and all associated materials.	Decommissioning
R5	<ul style="list-style-type: none"> <li>Lithium Ion Batteries would be kept, stored, managed and transported according to manufacturer's instructions and the ADG Code</li> <li>Any spent batteries would be recycled at a B-Cycle accredited, EPA permitted and licensed recycler of Li-Ion batteries.</li> </ul>	Construction/ Operation/ Decommissioning
<b>Cumulative Impacts</b>		
C 1	<p>Unapproved future dwellings:</p> <ul style="list-style-type: none"> <li>The applicant commits to providing the results of the visibility mapping to assist neighbours to locate future dwellings to minimise views to the solar farm site.</li> </ul>	Upon the submission of the EIS visual impact assessment documentation to DPE
C 2	<p>Essential Energy 66kV infrastructure refurbishment</p> <ul style="list-style-type: none"> <li>Detailed assessment will be required under Part 5 of the <i>Environmental Planning and Assessment Act 1979</i> (EP&amp;A Act), with Essential Energy to be the determining authority.</li> <li>Elgin Energy<sup>48</sup> would advocate for a design developed in consultation with local landholders to minimise the impact of transmission lines on agricultural equipment use and local movements.</li> </ul> <p>Consideration would be given to the mitigation strategies included in Appendix E:</p> <ul style="list-style-type: none"> <li>Obstacles which penetrate the OLS height limits are required to be reported to CASA for assessment.</li> <li>Accurate survey information would be used to determine actual acceptable pole heights in relation to the OLS surfaces in the locations identified and address the accuracy limitations of this desktop assessment, prior to works.</li> <li>Activities would be limited to standard construction hours.</li> <li>The occupants of adjoining lands would be advised of the works schedule and provided with details of a site contact. Any noise</li> </ul>	Design and construction

<sup>48</sup> While the works will be Essential Energy assets, Elgin will advocate on behalf of local landholders to maximise benefits of the refurbishment that can be obtained where practical.



ID	Mitigation measures	Project stage
	<p>complaints will be investigated.</p> <ul style="list-style-type: none"> <li>• All plant and equipment should be operated and maintained in accordance with the manufacturer's specifications.</li> <li>• Due Diligence assessment of the proposed transmission line augmentation alignment in consultation with Bathurst Local Aboriginal Land Council would be undertaken and would focus on sensitive lands forms within 200m of waters and provide a more general assessment elsewhere.</li> <li>• Works would be carried out to ensure the heritage listed buildings are avoided for all direct and indirect impacts during haulage and construction.</li> <li>• Minimise disturbance of the groundcover, particularly where there are native grasses present. Disturbed areas would be stabilised as soon as practicable following construction activities. Areas of disturbance would be kept to the minimum required for the safe and effective completion of the works.</li> <li>• Avoid impact outside the existing transmission easement and avoid disturbance around mapped waterways.</li> <li>• Contact local wildlife carers should injury to wildlife occur during construction.</li> <li>• Firefighting equipment would be present within all vehicles that would be on site during construction.</li> <li>• Spill kits would be kept on site and in machinery at all times. Any accidental leakages or spillage of liquid substances would be dealt with by taking immediate measures to contain, clean up and remove the spilled substance.</li> <li>• If signs of contaminated soils are discovered (e.g., smell, discolouration, suspect rubbish), the site should be marked, and the soil replaced to cover the contamination. Work must stop in the vicinity of the discovery with soil samples analysed to determine the type of contamination and an appropriate management plan would then be developed and followed.</li> <li>• Control measures will be implemented to manage risks associated with the handling of fuel through providing spill kits in close proximity to major plant items, using spill trays when undertaking in field re-fuelling (although avoid and use service station where practicable) and temporary fuel storage to be positioned away from waterways and bunded.</li> <li>• Monitoring of weather patterns during construction to inform construction staff about the threat of flooding. Contingency planning, to ensure equipment is not left within flood liable areas.</li> <li>• Appropriate dust minimisation measures would be implemented as required. Any potential dust borne materials (such as surplus spoil) transported from the activity site would be covered at all times during transportation.</li> </ul> <p>All vehicles and machinery would be well maintained according to manufacturer requirements to sustain emissions within</p>	

ID	Mitigation measures	Project stage
	acceptable limits.	
C 3	<p>Traffic management:</p> <ul style="list-style-type: none"> <li>The construction traffic management plan will consider the likely interaction between large nearby Projects and include measures to reduce any overlapping construction traffic schedules in consultation with relevant developers.</li> </ul>	Construction, operation and decommissioning